CLAIMS

What is claimed is:

1. A method for accurate design rule evaluation, said method comprising:
constructing sample design portions in a simulator;
sweeping simulated design parameters independently;
generating a hypermatrix of results of said sweeping; and
storing said hypermatrix in memory.

2. The method of claim 1 wherein said design parameters are selected from structural beam widths, beam lengths, beam heights, structural types, materials, FET gate widths, FET gate lengths, capacitance, resistance, and inductance.

3. The method of claim 1 further comprising:
extracting said swept parameters as indices; and
retrieving said results from said pregenerated hypermatrix.

4. The method of claim 3 wherein said retrieving comprises looking up said results in said hypermatrix using said indices.

5. The method of claim 3 further comprising using said results to evaluate an individual design.

6. The method of claim 5 wherein said individual design is selected from VLSI design, electronic circuit design, civil engineering design, and mechanical engineering design.

7. The method of claim 1 wherein said hypermatrix of results is a mathematical representation relating an array of mathematical functions of multiple independent variables to arrays of said multiple independent variables.

8. The method of claim 1 wherein said method is performed using computer executable software code.

9. A system for accurate design rule checking, said system comprising:
means for constructing sample design portions in a simulator;
means for sweeping simulated design parameters independently; and
means for generating a hypermatrix of results of said sweeping.

10. The system of claim 9 further comprising:
means for retrieving said results from said generated hypermatrix.

11. The system of claim 10 further comprising:
means for using said results to evaluate an individual design.

12. The system of claim 10 further comprising:
means for extracting said swept parameters as indices.